

## New England Biolabs Certificate of Analysis


*Product Name:* LpnPI  
*Catalog #:* R0663S/L  
*Concentration:* 5,000 units/ml  
*Unit Definition:* One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 (dcm+) DNA in 1 hour at 37°C in a total reaction volume of 50 µl.  
*Lot #:* 0041612  
*Assay Date:* 12/2016  
*Expiration Date:* 12/2018  
*Storage Temp:* -20°C  
*Storage Conditions:* 300 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 500 µg/ml BSA, (pH 7.4 @ 25°C)  
*Specification Version:* PS-R0663S/L v2.0  
*Effective Date:* 25 Jan 2016

Assay Name/Specification (minimum release criteria)	Lot #0041612
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 15 units of LpnPI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 hour)</b> - A 50 µl reaction in CutSmart® Buffer containing 1 µg of pBR322 DNA and a minimum of 5 units of LpnPI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	<b>Pass</b>
<b>Protein Purity Assay (SDS-PAGE)</b> - LpnPI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	<b>Pass</b>

\* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by  
Derek Robinson  
25 Jan 2016



Inspected by  
Mala Samaranayake  
26 Dec 2016

